USAWC STRATEGY RESEARCH PROJECT

SUSTAINING AMEDD PROFESSIONAL STRENGTH IN THE RESERVE COMPONENTS

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ABSTRACT

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Reserve components of the U.S. Army are a strategically valuable resource to U.S. military policymakers. Within these components are the majority of professional medical personnel. As of July 2002, the AMEDD consisted of 19% Army National Guard, 34% Army Reserve and 47% active component. In 2000 concerns were raised about dwindling numbers of doctors, dentists, physician assistants and nurse anesthetist officers in Army Reserve and Army National Guard (Selected Reserve [SELRES]) that, without intervention, would result in projected shortfalls through 2005. Also in 2000, significant increases were projected in the percentage of retirement letter eligible Medical Corps, Dental Corps, Army Nurse Corps, and Physician Assistants. This has potential risk in light of the changing nature of activations and increased OPTEMPO. Potential effects of mobilization and deployment on recruitment, retention and other related issues are explored. Suggestions for improving recruitment and retention are discussed.

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SUSTAINING AMEDD PROFESSIONAL STRENGTH IN THE RESERVE COMPONENTS

> The mission of the AMEDD is to maintain the health of members of the Army, conserve the Army's fighting strength, and prepare for health support to members of the Army in times of deployment across a continuum of scenarios, ranging from international conflict to civic actions and disaster relief. The AMEDD also provides health care for eligible personnel in peacetime for the sustaining base. The AMEDD is also responsible for maintaining the readiness and clinical/technical competence of medical personnel to support Army requirements.[1]

The Army Medical Department [AMEDD] requires sufficiently trained professionals to accomplish its mission. Through the AMEDD Center and School, it examines force structure, personnel inventories, and life-cycle management—in all AMEDD career fields.[2] One of the chronic problems in personnel inventories has been the inability to fill professional positions in the reserve component [RC] AMEDD—usually in the Medical Corps.

In 2000, particular effort was made to broadcast to the regional medical commands and their affiliated reserve medical commands problematic trends in the RC personnel inventory of doctors, dentists, physician assistants and nurse anesthetist officers. These AMEDD specialties were of concern because they were (and are) considered vital to deploying units.[3] Unfortunately, these specialties had the lowest numbers assigned as a percentage of their authorized positions.[4] Through problems in recruiting and retention, aggregate strength (given past shortfalls and projected future shortfalls) was and continued to be insufficient to fill authorized positions (see Figure 1). For example, the Army National Guard [ARNG] and Army Reserve [USAR] were nearly equal in shortage percentages in 2000 with the Selected Reserve Medical Corps fill only 63.58% of the authorization.[5]

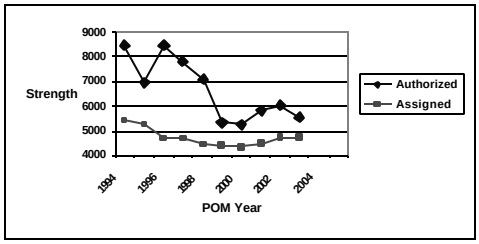

FIGURE 1: DOCTORS, DENTISTS, PHYSICIAN ASSISTANTS AND NURSE ANESTHETIST OFFICERS IN USAR AND ARNG SELECTED RESERVE (SELRES)[6]

This particular officer group was also graying. The data was revealing given the contrast of current and future retirement-eligible SELRES clinicians (see Table 1).

Corps/Specialty	Retirement Letter In Hand FY99 (PEBD Pre-1980)	Retirement Letter In Hand FY04 (PEBD Pre-1985)
MC	36%	51%
DE	69%	82%
AN	27%	49%
SP(physician assistant)	49%	72%

TABLE 1: RETIREMENT ELIGIBLE SELECTED RESERVE CLINICIANS[7]

To summarize, the AMEDD was faced with a reserve clinician strength management problem. Recruiting and retention efforts had not been able to meet readiness standards for projected wartime strength, and the remaining strength was growing older. An increasing operations/operating tempo [OPTEMPO] had negative efforts on the strength of this group in the past; and there was no reasonable likelihood of OPTEMPO decreasing in the near future. Simply continuing what had not worked in the past was not a viable option. This was a problem deserving of research, thought, and decisive action. It has been a long-standing and recurring problem. It was and remains a problem worthy of the attention of strategic leaders.

During the 8 May 2003 Reserve Component Coordination Council meeting[8], General John Keane, then Vice Chief of Staff of the Army; Major General Kenneth Herbst, Deputy Surgeon General; and Lieutenant General James Helmly, Chief, Army Reserve; discussed this issue—the AMEDD clinician aggregate inventories were "insufficient to meet wartime requirements."[9] The problem remains largely in the Medical Corps. There have been improvements in the other AMEDD corps. In order to maintain sufficient personnel, the President may issue what is known as a "stop loss" [also written STOPLOSS] during any Presidential Selected-Reserve Call-up or higher mobilization action.[10] (A STOPLOSS is the Presidential suspension of any law relating to promotion, retirement, or separation.)[11] However, despite recent STOPLOSS actions and despite the adjustment downward of the number authorized in the Medical Corps, the Medical Corps remained at only 78 per cent of their authorized strength as of 31 March 2003.[12]

Given the resilience of the problems of RC AMEDD clinician strength management, it is worthwhile examining and discussing related factors. This paper will examine some of these factors, review surveys and interviews of Army Reserve AMEDD professionals, and make recommendations to improve recruiting and retention of Army Reserve AMEDD clinicians. Before examining factors and surveys, additional background is worthwhile reviewing.

RESERVE COMPONENT AMEDD UP TO 1990

The Army Reserve AMEDD came into existence in the early 1900s. Prior to the existence of the Army Reserve, the AC looked to civilian and National Guard medical professionals to supplement the AMEDD in wartime. In peacetime, although the National Guard had physicians within its ranks, they were not available to supplement the U.S. Army unless federalized. As a result of the Spanish-American War the Army and its AMEDD realized significant changes had to occur. Added to this, in the early 1900s, the AMEDD was continuously short of physicians, even when supplemented with contract physicians. In 1908 Congress created the Medical Reserve Corps. This was extremely important both to the AMEDD and the Army as it was the Army's first reserve corps that would be federally available without having to mobilize state forces.[13] This is also considered the establishment of the Army Reserve. That is, when the Medical Reserve Corps was absorbed into Officers' Reserve Corps in June 1917,[14] the concept of a federal reserve for the Army was broadened. Thus, from a portion of the AMEDD, sprang what has become the Army Reserve.

The newly created Medical Reserve Corps (later known as the AMEDD officers of the Army Reserve) and, when federalized the National Guard, supplemented the Regular Army AMEDD, both in peacetime and wartime. To summarize a complicated history into few words, after several decades and several major wars, both the active and reserve AMEDD changed significantly, adding specialties and branches along the way. Maintaining adequate professionals in the Regular Army was periodically very problematic. The period following World War II is illustrative. The Army needed to be larger following World War II than it was before that war. Therefore, Congress authorized, for an eight-month period shortly after World War II, the U.S. Army to provide Regular Army appointments to officers with reserve commissions. The name for this program was the "Regular Army Integration Program."[15] There were more than 45,000 medical officers who could have applied for a Regular Army commission during World War II, but only slightly more than one percent applied.[16] Despite the Army's post World War II program to increase AC commissioned officers of all branches, a dramatic shortage of physicians and dentists continued. This broad shortfall attracted national attention as it existed in the Navy and the Public Health Service, not just the Army.

> This created an awareness, not only in the top levels of the military service but also among members of Congress, that in order for the military services to maintain Medical and Dental Corps of suitable size and quality, some special provision would have to be made for their members to compensate for the extra time and money invested in their education and training, and permit them to have a standard of living at least closer to that of their civilian counterparts.[17]

Subsequently, doctors of medicine and dentistry had their pay increased by $100 per month and procurement authorized up to the grade of colonel.[18] This is the first time legislation was created for the particular advantage of officer clinicians in these specialties.[19]
Other than the use of 240,000 soldiers of the Organized Reserve in the Korean Conflict and a mobilization of 69,000 Army Reservists during the Berlin Crisis, activations of Army Reserve units during the Cold War (prior to Desert Shield/Storm) were not, by comparison, nearly as significant. During those quiescent Cold War years, the relationship between the active and reserve AMEDD grew into one where RC AMEDD officers understood themselves as an asset likely to be used only in the event of a major conflict. The likelihood of mobilization of the Army Reserve AMEDD officer was estimated in the 1980s to be once, maybe twice, in a career—possibly never. Desert Storm changed that.

RESERVE COMPONENT AMEDD SINCE 1990

Desert Shield/Storm resulted in a large call-up of the RC AMEDD. “The medical forces on active duty reached 87,487 in February 1991, the largest force since World War II. More than 23,000 AMEDD personnel, about 55% of whom were Reserve Component, were deployed to SWA.”[20] Despite the use of 198 medical units (in addition to medical assets already organic to combat divisions), the General Accounting Office (GAO) characterized this effort in the title of their report as “Full Army Medical Capability Not Achieved.”[21] Despite this less than glowing report, the RC was tasked more than ever. In the years following Desert Shield/Storm, the RC were mobilized and deployed much more frequently than before 1990. A graphical presentation of the growing RC duty days is represented in Figure 2 and bears a brief explanation. The solid line shows the RC direct support. The pattern reveals an increasing baseline operations tempo (OPTEMPO) that is independent of the spikes (dashed lines) of Operations Desert Shield/Storm and Nobel Eagle/Enduring Freedom. The RC AMEDD was proportionally mobilized during this period of increasing OPTEMPO.

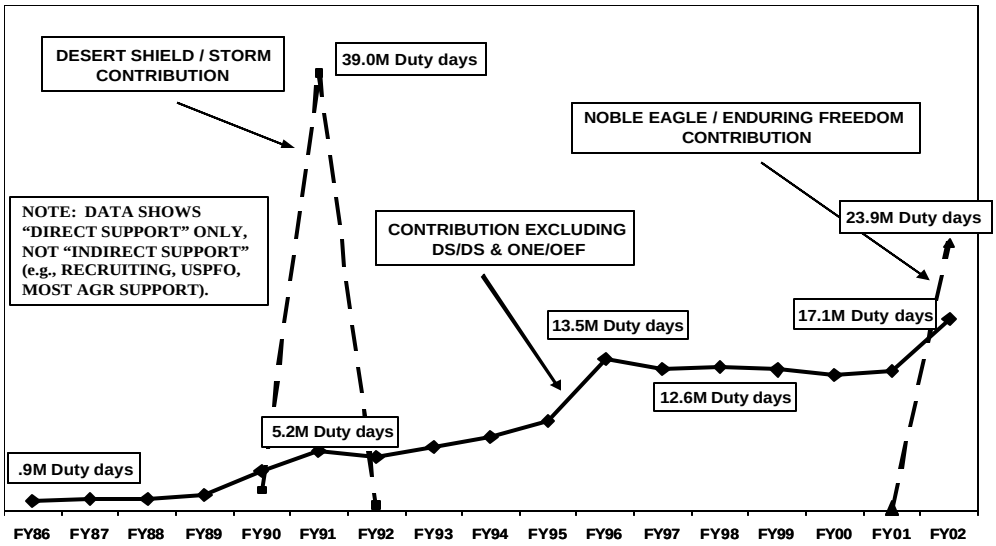

FIGURE 2: RESERVE COMPONENT CONTRIBUTION TO MISSIONS[22]

CURRENT AMEDD STRUCTURE

The Army Reserve is a significant portion of AMEDD assets. The AMEDD structure is 47% AC (not including civilians) and 53% RC (34% Army Reserve and 19% Army Nation Guard).[23] At this point a fair question would be, "Why mention AMEDD structure in a paper entitled 'Sustaining AMEDD Professional Strength in the Reserve Components'?" The answer is that structure drives the requirements. Changing the structure may improve (or worsen) the manning requirements. Currently there is much work underway in this regard. For much more detail, the reader is referred to the Medical Reengineering Initiative (MRI) Program Implementation Office website.[24] Important to RC AMEDD strength requirements is that one purpose of the MRI is reduction of the need for difficult-to-recruit specialties in the Army Reserve. "MRI improves personnel readiness within the United States Army Reserve (USAR) by reducing requirements for officer and enlisted specialties that are difficult to recruit and retain. The USAR medical personnel savings estimate is 2500 spaces."[25]

It is worthwhile to examine the changes to the Army Reserve that MRI could bring. Table 3 (from data presented January 2003) illustrates potential improvements. Assigned total Medical Corps, general surgeon, and orthopedic surgeon figures in Troop Program Unit (TPU) positions and Professional Filler System (PROFIS) positions are under the assigned header. When those assigned figures are used in the current authorized Medical Force 2000 (MF2K) positions, you

can see the percentage fill in the next to the last column. Under the structure proposed by MRI, the assigned percentage fill is in the last column; all three improve—Medical Corps (111 percent with MRI), general surgeons (100 percent), and orthopedic surgeons (88 percent).

CATEGORY	ASSIGNED			MF2K AUTH	MRI AUTH	MF2K ASSG%	MRI ASSG %
	TPU	PROFIS	TOTAL				
TOTAL MEDICAL CORPS	610	88	698	878	625	79	111%
61J-General Surgeon	125	0	125	198	125	63	**100%**
61M-Orthopedic Surgeon	39	5	44	94	50	47	**88%**

TABLE 2: PERSONNEL CHANGES WITH MRI[26]

RETAINING RC AMEDD PROFESSIONALS

Retaining the large number of specialties in the AMEDD is no small task. Within the Medical Corps—currently the most problematic to fill—the specialties number forty one (41).[27] Each of those specialties has its medical board certification requirements, and each its market supply and demand issues. Providing ongoing meaningful and balanced military training and continuing education to all those specialties is also challenging to both the AC and RC. These ongoing issues have to be addressed to retain quality professionals.

Mobilizations also have a considerable effect on retention of physicians. Those physicians in solo practice are most affected by the disruption to their practice. Five years following Desert Shield/Desert Storm, some mobilized units retained only fifty percent of the number of physicians before that operation.[28] The Department of Defense Inspector General 1996 report gives a broader, more objective and more sanguine history. From FY 1990 to FY 1995, there was a decline of twenty-five percent in the number of assigned physicians in the Army Selected Reserve.[29] However, commenting on problems of physician recruitment and retention in the selected Army Reserve, the Inspector General of the Department of Defense reported:

> The perception that a Reservist would be mobilized only for a major conflict has been replaced with the realization of greater Reserve Component participation in peacekeeping missions. For physicians, the greater participation in peacetime missions equates to a greater risk of extended active duty, income loss, and business loss, and this adversely affects recruitment and retention in the Reserves.[30]

Echoes of that Inspector General's 1996 comment resounded when a third of the Army Reserve physicians sent to the Balkans from 1995 to1998 left the Army Reserve.[31] Recruitment to fill those losses was difficult.[32]

RECRUITING RC AMEDD PROFESSIONALS

Recruiting is a huge service industry and an enormous topic about which volumes have been written. There is even a specialized service industry built around recruiting medical professionals. Even within the Army, the AMEDD officer recruiting is operated separately. It is therefore the intent of this section to address three relevant issues—those that may lend themselves to potential improvements in recruiting Army RC AMEDD professionals. The first issue will be a short discussion of the importance of locality in RC recruiting; the second will be the some management and advertising issues; and the third will be incentives and compensation.

A major difference between recruiting for the AC and RC is that RC recruitment is based on locale. That is, when a soldier is recruited for the RC, he (or she) is recruited for a unit nearby his (or her) home. Changes in AMEDD recruiting have noticeably changed in the past 20 years. Formerly some RC hospitals had AMEDD recruiters physically collocated.[33] This situation has changed as these recruiting efforts have been regionalized, and sometimes these regional offices are an uncomfortable distance away from reserve medical units.[34] AMEDD recruiters are not as likely to recruit local medical professionals to units that are some distance away. When these distant units receive recruits, they may be from further away than most AMEDD professionals are willing to travel for regular participation in RC units. RC AMEDD recruiters will likely use or need to use more travel funds (than AC counterparts) if the RC AMEDD recruiting cannot locate closer to the RC medical units they support.

The second recruiting issue concerns the management of the recruiting effort, and part of this issue again involves the structure of AMEDD recruiting regions. This effort must include increased recruiter efficiencies by improved management and better targeted marketing. The Army G1 recognizes a need to “improve AMEDD Recruiting by increasing recruiter efficiency and revising structure."[35] AMEDD recruiting regions are the same for AC and RC. The AMEDD recruiting regions are not completely geographically collocated with regional medical commands or regional reserve commands. This contributes to inefficiencies in coordinating with these regions. Some other regional discontinuities are difficult to explain. Some AMEDD recruiting centers are, in some areas, located near the borders of their regions. This makes recruiting efforts on the periphery of their region take significant travel time. Also, medical schools and large population centers close to reserve medical units are sometimes placed in another recruiting region. Returning to the theme of locale, the reduced availability of those schools and centers to the assigned recruiter makes the local recruitment effort all the more difficult.

While the AMEDD recruiters remain of high quality, there have been recent changes that reduce the overall effectiveness of RC recruiting efforts—specifically those attempts to transition officers from the Individual Ready Reserve (IRR). The mission to recruit from the IRR into TPUs has been shifted to retention and transition noncommissioned officers (RTNCOs), military occupational specialty (MOS) 79V, within the Army Reserve. United States Army Recruiting Command (USAREC) no longer has this mission. This mission change affected recruiting of all IRR personnel—both non-AMEDD and AMEDD. However, these RTNCOs do not have the requisite training or experience to address AMEDD-specific issues. Compared to the USAREC AMEDD-specific recruiters, the generalist RTNCOs are sent scurrying to research questions about the RC AMEDD. However difficult recruiting or transitioning RC AMEDD personnel from the IRR to TPU was before the change of mission, that effort is now all the more difficult. RTNCOs that support medical units need AMEDD-specific training. Recruiting efforts for RC AMEDD professionals must be more focused on RC-specific factors to improve.

The advertising for the RC AMEDD must be targeted. For example, when medical units are short of orthopedic surgeons in a state (or region), advertising and marketing dollars should target that specialty and area. That is, funds should be spent on orthopedic journals, orthopedic medical society meetings, and orthopedic residency programs. Further, those funds should target the state, region and major metropolitan area. Many times specialties will organize even as small as a city level to share information on a regular basis. However, no amount of advertising and marketing will compensate if the incentives and compensation package is incorrect.

A relevant discussion of recruiting and retention must address incentives and compensation. In depth studies of military compensation, recruiting, and retention are readily available.[36,37] A singular message can be gleaned from a review of those studies. The economics of recruiting are dynamic and complex. Army recruiting and Army AMEDD recruiting professionals have recognized these variable complexities. Programs analysis and evaluation sections within Army personnel management continuously monitor the need for appropriate incentives and compensation. However, these packages are limited by law and may require changes.

There are a variety of incentives to attract professionals and potential professionals. A sample of these programs briefed during 2002 is in Table 4, AMEDD Incentive Programs.

Financial Assistance Program (FAP)	MC, DE (RA)	$1058/mo plus annual grant of $23,379	2 years for each year
Specialty Training Assistance Program (STRAP)	MC, DE, AN, MS (USAR-WCSL)	$1058/mo	1 year for each year plus 1 year
Loan Repayment	DE, MS (RA); (USAR-WCSL)	DC, MS (Pharm) up to $100,692; USAR-WCSL $50,000	
Health Professions Bonus	DE, AN (RA); MC, DE, AN (USAR)	RA DC $30,000; RA AN $5,000; USAR MC, DC, and 66F $30,000; USAR 66H8A $9,000	
Early Commissioning Program (ECP)	VC, DE (RA)	Time in service and time in grade accrue from commissioning date	
Educational Programs	MSN Nurse Anesthesia, MSN Critical Care, PT Baylor, Dietetic Internship, PA Program, OTFWE, CPIP, Pharmacy Residency		

TABLE 3: AMEDD INCENTIVE PROGRAMS [38]

These incentives attract large numbers, but they are not the whole story. Some of the incentives have been in place without change for a number of years and are becoming threadbare with the wearing. For example, the $50,000 loan repayment for USAR participants has lost value over time and appears less and less significant to physicians graduating with heavy education debts. To those recently graduated physicians, the risk to their practice by involvement in the Army Reserve is less and less compensated—especially in an increasingly higher OPTEMPO environment.

Within the AMEDD, there are a variety of compensations available. Health Professions Special Incentive and Retention Pay[39] is a somewhat flexible tool to tackle variable shortages of AMEDD clinicians.[40] The constant monitoring and the flexibility of compensation have combined to keep compensation from being a major issue for most AMEDD retention and recruiting—at for the AC. RC AMEDD compensation issues are excepted for reasons that follow.

When comparing the compensation of the civilian physician, the individual-to-individual compensations, as a general rule, are somewhat competitive with the total military compensation (with notable exceptions in the highest paid specialties). Figure 3, Civilian Specialty Compensation versus Recruiting Accomplished, reveals the difficulties recruiters face in those specialties that are the highest compensated. That is, the offered compensation to orthopedic and neurosurgeons are not attractive enough to entice them into the Army Reserve.

However, simply equating the compensation of the individual, whether civilian or military, does not consider the practice or business factors (beyond the individual compensation) that are important to the physician who gets mobilized. Consider that the physician in a private practice, whether group or solo, has to leave his patients to the care of others. When those patients leave, some never return. This is both a business and a relationship issue.

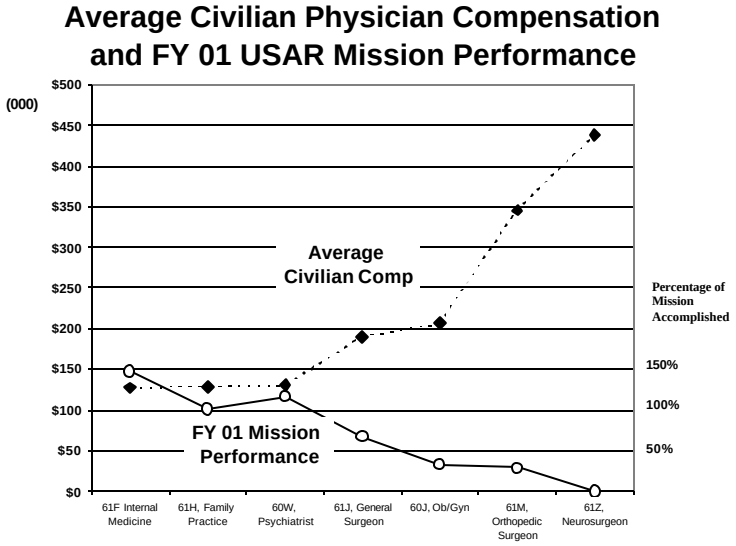

FIGURE 3: CIVILIAN SPECIALTY COMPENSATION VS. RECRUITING ACCOMPLISHED[41]

There are more specific business issues. Malpractice coverage is an excellent example of a difficult issue. Those physicians leaving their practice must continue malpractice insurance coverage, even during military service, and for high-risk specialties the cost may be considerably more than $100,000 annually. This cost is not considered when equating civilian and military compensation; military physicians are not required to carry separate malpractice. Here is another example. When a physician leaves a practice, that physician leaves behind associated office and clinical staff which depend on physician-generated income to pay their salaries. How can that loss be covered to keep the office open or at full capacity? An Army Reserve physician would be wise to have agreements to cover their practice prior to mobilization but most do not. That planning failure will be discussed later in this paper.

EXAMINATION OF DATA COLLECTED FOR THE ARMY

Well conducted collections of objective data may cast off predisposed thinking about particular groups and open up new possibilities. As stated earlier, the problem of insufficient

personnel has historically been and remains largely in the Medical Corps, both AC and RC, although it is currently more a problem for the RC. Examining relevant data concerning that group has led strategic leaders to make decisions in an attempt to solve the problem. In the three subsections below are very brief discussions of the following: a "1996 Survey of USAR Physicians," a "2001 Mail Survey of ARNG and USAR Physicians, Dentists and Nurse Anesthetists," and a collection of data from Kosovo rotation focus groups during March to November 2001. The latter focus groups were conducted with the 313th And 399th Army Reserve Combat Support Hospitals.

1996 SURVEY OF USAR PHYSICIANS

This 1996 sample of 835 responding Army Reserve physicians was representative of the larger population. Almost half had been mobilized at least once during the previous six years.[42] Mobilizations were a, if not the, prominent concern. The summary of the survey report is illustrative:

> Receiving money from the USAR is not a major motivator for joining or staying in the Reserve—service to country is consistently the highest rated reason. The fear of financial difficulty, however, due to mobilization is a major consideration in decisions to leave. Basically, physicians join and stay for altruistic reasons (i.e., service to country), find service gratifying, but when service threatens their personal financial security, they chose (or are forced) to leave the Reserve.[43]

In light of the previous section's discussion of compensation, this statement bears further explanation. Simply put, Army Reserve physicians do not join for the money. Were that the case, economics would dictate far fewer would join. When mobilized and paid equivalently, their individual income—even when close to the same as their AC counterparts—does not compensate for the damage to their practice, continuing malpractice costs, etc. In many cases, the Army, with its increasing OPTEMPO and related increased RC mobilizations, pushes the altruistic motivations of some clinicians beyond the acceptable.

Not contained in the above report summary are two relevant items discussed elsewhere in this 1996 survey. One of these is the survey recommendation of "definitely implement the Ready Reserve Mobilization Income Insurance."[44] This insurance program was already implemented by the time the report was published, but the self-funded program went bankrupt and was discontinued in 1997. Private insurers steered clear of that insurance for many reasons, but the idea remains relevant, and it has not completely disappeared. A 2003 GAO report reveals, "The Army has proposed a new special pay targeting critical health care professionals in the reserves who are in private practice and are deployed involuntarily beyond the established rotational schedule."[45]

A second item worth reviewing was not contained in the 1996 summary recommendations. This item was a suggested by data further within the report and was later transformed into policy. That policy is the ninety days boots-on-the-ground (90-day BOG) policy. Eighty-one percent of the physicians surveyed said they would have serious negative impact to their civilian practices if mobilized more than ninety days.[46] A pilot policy was initiated by the Assistant Secretary of the Army (Manpower and Reserve Affairs) limiting the involuntary mobilization for RC physicians, dentists and nurse anesthetists to 90 days.[47] This pilot program was successful and improved retention, especially among the self-employed.[48] Today, the 90-day BOG is established as policy and is now included on published orders. Unfortunately for some, the implementation has not been the 90-day mobilization they expected. Because of the needs of the Army, the 90-day mobilization was changed to 90-days BOG. Slow in and out processing and additional train-up periods for overseas deployment have meant up to 180-day mobilizations for some—with 90 days in theater—resulting in additional serious negative impact to the RC AMEDD provider's practice. Also, awareness of this policy has not been uniform as will be shown in the 2001 Survey of RC Physicians.

2001 MAIL SURVEY OF ARNG AND USAR PHYSICIANS, DENTISTS AND NURSE ANESTHETISTS[49]

This 2001 survey and the focus group data are related. In, "2001 OTSG contracted with AmerInd, Inc. and its subcontractor, Applied Research Analysts to evaluate the Presidential Reserve Call-up 90-day Rotation Pilot Program for RC Physicians, Dentists, and Nurse Anesthetists via mail-out survey, focus groups from deployed RC units, and in-depth interviews with operational officials responsible for implementing the program."[50]

There were 865 responses with data adequate for analysis.[51] From the title it is obvious this was a broader population than the 1996 survey. There was significant interest in separating results into populations that had and had not been mobilized. The following are just two of many, actionable bullets from this survey:

> The majority of respondents (55% in both groups) had made no preparations in their practices for the possibility of mobilization.[52]
>
> A large number of respondents were not aware of the 90-day cap (40% of USAR respondents and 51% of ARNG respondents).[53]

Recommendations contained in this survey should be distributed to RC medical commanders and staffs at all levels. It is not surprising that mobilization would be upsetting to a group fifty-five percent of whom are without preparation of their practice. Redeployment retention might improve if a practice or business care plan (to parallel the current Army "Family

Care Plan" policy) to reduce business losses were a pre-mobilization requirement. The large number unaware of the 90-day cap is also surprising. The RC must do a better job of educating its professionals. This is especially true considering the finding that "of the USAR respondents who were aware of the 90-day cap were significantly more likely to say that they intend to remain in service (59%) than respondents who were not aware of the cap (42%)."[54]

Length of service also has a role in retention. Those who stay longer are more likely to want to remain until retirement. This is supported by the finding that "the percentage of USAR respondents who intend to remain until retirement increases dramatically in the period shortly after 10 years of service (about 7 years for ARNG respondents), most likely because they are 'over the hump.'"[55] Incentives should be incorporated in contracting with professionals for commitments that get them past 10 years. If U.S. Army incentives could induce a commitment of 10 years, this would apparently increase the intention to stay until retirement.

2001 FOCUS GROUP DATA

John Whaley and Dr. Sandra Baxter of Applied Research Analysts moderated six focus groups with the 313th and 399th USAR Combat Support Hospitals deploying to and returning from Kosovo during March to November 2001.[56] There were a total of 46 participants. There are some general statements that can be made after review of that data. Most participants thought 90 days was about right; although they realized the 90-day cap would increase the speed of rotations and their likelihood of being deployed again.[57] The biggest frustration was the wasted time and redundant training during the deployment and redeployment process.[58] When replacements arrived in a timely fashion, short overlap periods were all that were necessary.

There were several suggestions for the 90-day BOG policy after the focus groups. Those falling under the 90-day BOG policy are called "cappers." These suggestions were numerous, so those listed here are just a sample and the reader is referred to the 2001 report for more: improve unit chemistry, educate "non-cappers," expand the 90-day BOG to other small business owners, allow "cappers" to provide medical care to indigenous personnel, and include motivated redeploying "cappers" in recruiting efforts.[59]

After examining feedback, Amerind and Applied Research Analysts, Inc., recommended several changes to the 90-day policy in their recommendations. Again the reader is referred to the study for a complete list.[60] However, one of these recommendations was to change to the 90-day BOG policy to a 100-day door-to-door policy. They suggested allowing for seven administrative days at the front-end and three at the back. Unless the current method of

mobilizing and redeploying these AMEDD professionals is changed significantly, few officers will have their total administrative processing completed in ten days.

EXAMINING SOLUTIONS

In regard to the problem of adequately manning the RC AMEDD with sufficient professional clinicians, the background, history and recent surveys have been presented. Now it is time to review the solutions. These will be discussed in two sections—short-term and long-term solutions.

SHORT-TERM SOLUTIONS

Short-term solutions include targeted marketing, restructured and focused recruiting, policy education, improved and shortened deployment and redeployment procedures, contracting, and compensation. Targeted marketing includes advertisement in problem areas. Marketing firms specialize in targeting populations; those firms can help the Army fine tune its efforts. USAREC can redesign RC AMEDD recruiting boundaries to align with medical and reserve commands and to include nearby population centers and medical schools with supported reserve medical units. They can also allocate RC AMEDD recruiters to smaller regions. These recruiters will then more available locally. All RC AMEDD recruiting needs to be focused locally.

Education about RC AMEDD issues must be improved. RTNCOs, at least those that support medical units, need education in RC AMEDD-specific issues and recruiting. Education about policies such as the 90-day BOG policy must be improved and must be briefed to all medical personnel—not just the affected clinicians.

The deployment and redeployment of personnel affected by the 90-day BOG policy must be consistently shortened if the policy is to have the intended effect. That is, the Army cannot market a 90-day BOG then add significant additional time in deployment and redeployment. The deployment and redeployment processes also bear refinement. If physicians routinely deploy and redeploy through the same mobilization center, some additional attention can be paid them in the name of retention. (For that matter, that is true for all soldiers going through those processes.) Downtime needs to be reduced for these professionals, and where possible, downtime needs to have meaningful options. Counseling regarding medical pay, meaningful train-ups, and continuing medical education videos could be made available to fill up waiting time.

Contracting should be viewed more as a short-term solution since contracting is generally costlier than mobilizing the RC. However, in the interest of providing medical specialists in short

supply to deployed units, contracted civilian specialists can fill the gap within the United States thus freeing military specialists for overseas deployment. Contracting is already being used to some extent. During Operation Iraqi Freedom, Army hospitals within the United States had AC AMEDD professionals deployed from those facilities. Expected backfill was sixty percent from the RC with the remainder to be made up from realignment of local structure, contracting medical professionals for the local hospital, or outsourcing to TRICARE.

Minor adjustments in compensation to Army medical clinicians are programmed to compensate for short-term market variations. For example, when a specialty is in short-supply, certain parts of the Health Professions Special Incentive and Retention Pay can be adjusted to attract those specialists. While the current status of compensation and incentives were discussed in an earlier section, they need more improvement than the currently available minor adjustments. However, other improvements to incentives and compensations will have to come through legislation—a longer term solution.

LONG-TERM SOLUTIONS

Long-term solutions include restructuring the force, rewriting contracts (with incentives) to get younger RC professionals over the 10-year "hump," and flexible consideration for AC professionals willing to take an extended RC commitment in place of a much shorter AC commitment.

The Medical Reengineering Initiative program may make the problem of finding and keeping enough RC AMEDD professionals a moot point. As stated earlier, one of its goals is to reduce the requirement for specialties that are in short supply. It is designed to provide full medical capability with reduced resources and to reduce the medical footprint in the theatre. MRI is the AMEDD's transformation spearhead, and the restructuring has already begun with some units already activated. This is truly a long-term solution as the execution plan extends to 2010. However, a large part of MRI has yet to be resourced, that is, has yet to have been allocated planned resources.

Incentives should be improved. Incentives that have deteriorated over time with inflation should be updated and a mechanism engaged to keep those incentives current. The Army should conduct additional research into assistance to the deployed, such as mobilization insurance/private practice deployment pay, to make sure those solutions are viable. Further the RC needs to carefully examine how much involvement it should have with individuals who play key roles in small partnerships and solo practitioners. Specifically, a plan should be in place

before these soldiers are mobilized. This issue becomes more critical with the increasing use of RC AMEDD professionals.

Some additional thought can be given to encouraging AC physicians who are leaving at the end of their commitments to continue their participation in the RC as an active participant (attending monthly drills) instead of being sent to the IRR, where they have little to no participation in the RC. Even if this included a guarantee of no mobilization for 3 years (except in the event of total war) or reduced AC time in exchange for somewhat longer RC participation, the valued experience they bring to the RC, in addition to adding to RC strength, would be a multiplier. This period of stabilization for young physician would reduce uncertainty during their period of transition to civilian practice.

CONCLUSION

The implied contract with the RC has changed significantly since 1990. In March 2003, the GAO worded this well:

> Since the end of the Cold War, there has been a shift in the way reserve forces have been used. Previously, reservists were viewed primarily as an expansion force that would supplement active forces during a major war. Today, reservists not only supplement but also replace active forces in military operations worldwide.[61]

Senior leaders implementing potential solutions for improving the RC AMEDD professional strength must keep in mind just how much this implied contract with RC soldiers has changed.

This paper has reviewed the status of the chronic problem of achieving sufficient RC AMEDD professional strength and proposed solutions. Today's solutions must adapt to the current circumstances, which have changed dramatically since Desert Storm. We cannot expect solutions from ten, or even five years ago, to be current; we will have to continue to innovate. Whatever solutions are implemented, rest assured the Army must and will continue to provide quality medical care to its soldiers.

WORD COUNT= 5,885

ENDNOTES

[1] Department of the Army, *Installation Management*, Field Manual 100-22, (Washington, DC: U.S. Department of the Army, 11 October 1994), 1.

[2] U.S. Army War College, *How the Army Runs: A Senior Leader Reference Handbook, 2003-2004*, (Carlisle Barracks, Pennsylvania: U.S. Army War College, 2003), 419.

[3] LTC Nancy Fortuin, Office of the Surgeon General (Reserve Affairs), "OTSG Update," data from briefing slides, Atlanta, Georgia, Southeast Regional Medical Command Readiness Conference, 18 March 2000.

[4] Ibid.

[5] Ibid.

[6] MG Kenneth Herbst, Deputy Surgeon General, "Army Reserve Medical Corps Recruiting," briefing slides with commentary, Washington, DC, Office of The Surgeon General, Department Of The Army, 15 August 2003. Presentation was forwarded with related information to the author from the AMEDD Center and School on 18 September 2003. Graph is extracted from a briefing slide.

[7] Fortuin, briefing slide.

[8] COL John L. Strong, Director for Reserve Affairs, Office of the Chief of Staff, Department of the Army, "RCCC Meeting Memorandum of 8 May 2003: Key Points and Taskings," memorandum for Reserve Component Coordination Council, Washington, DC, 16 May 2003.

[9] Herbst, briefing slide.

[10] U.S. Army Forces Command, *Reserve Component Unit Commander's Handbook* , FORSCOM Regulation 500-3-3 (Fort McPherson, GA: Forces Command, 15 July 1999), 7.

[11] Ibid.

[12] Herbst, briefing slide.

[13] Mary C. Gillett, *The Army Medical Department, 1775-1818,* (Washington, DC: Center of Military History, United States Army, 1995), 322.

[14]Ibid., 382.

[15] John H. McMinn and Max Levin, *Personnel in World War II: Medical Department, United States Army* (Washington, DC: Office of The Surgeon General, Department Of The Army, 1963), 505.

[16] Ibid., 507.

[17] Ibid.

[18] Ibid.

[19] Ibid., 508.

[20] LTG Frank F. Ledford, Jr., “From the Surgeon General of the Army: Medical Support for Operation Desert Storm,” *Journal of the US Army Medical Department* (January/February 1992) 3-4.

[21] General Accounting Office, *Operation Desert Storm - Full Army Medical Capability Not Achieved: Report to the Chairman, Subcommittee on Military Personnel and Compensation, Committee on Armed Services, House of Representatives,* (Washington, DC: U.S. General Accounting Office, August 1992), title page.

[22] John D. Winkler, Deputy Assistant Secretary of Defense (Manpower and Personnel, Reserve Affairs), “Reserve Component Contributions to National Defense,” briefing slide with commentary, Arlington, VA, Dr. Winkler was the moderator of a panel briefing to Defense Department Advisory Committee on Women in the Services (DACOWITS) meeting, 9 May 2003; available from <www.dtic.mil/dacowits/briefings/ReservePanel.ppt>; Internet; accessed 14 October 2003.

[23] LTG James B. Peake, U.S. Army Surgeon General, “Introduction to the AMEDD,” briefing slides with commentary, Washington, DC Office of the Surgeon General, Department of the Army, July 2002.

[24] U.S. Army Surgeon General, Medical Reengineering Initiative Program Implementation Office, Fort Belvoir, Virginia, Medical Reengineering Initiative Program Home Page [webpage]; available at <http://mrimedforce.belvoir.army.mil/index.html>; Internet; accessed on 21 December 2003.

[25] Doug Rabren, “Medical Reengineering Initiative (MRI) Program,” information paper, Medical Reengineering Initiative Program Implementation Office, Fort Belvoir, VA, 6 December 2002; available from <http://mrimedforce.belvoir.army.mil/memoranda/MRIInfoPaperDec02.htm>; Internet; accessed 21 December 2003.

[26] U.S. Army Surgeon General, Medical Reengineering Initiative Program Implementation Office, Fort Belvoir, VA, “Medical Reengineering Initiative Information Briefing: United States Army Reserve General Officer Update,” 17 January 2003; available at <http://mrimedforce.belvoir.army.mil/briefings.htm >; Internet; accessed 20 December 2003.

[27] United States Army Medical Department Regiment, *Army Medical Department Guide*, Chapter 3 [undated webpage] (Fort Sam Houston, Texas: United States Army Medical Department Regiment); available from <http://ameddregiment.amedd.army.mil/otg/chapter_3.htm>; Internet; accessed 21 December 2003.

[28] Personal experience with the 5010th U.S. Army Hospital, Louisville, KY, under the 332nd Medical Brigade. Both units were mobilized for Desert Storm.

[29] Department of Defense Inspector General, *Physician Recruitment and Retention in the Army Selected Reserve*, Report No. 97-033, 26 November 1996, executive summary page. The

actual numbers declined from 4,391 assigned physicians in FY 1990 to 3,288 assigned physicians in FY 1995.

[30] Ibid., 2.

[31] AmerInd, Inc. and Applied Research Analysts, "Evaluation of the Presidential Reserve Call-up 90-Day Rotation Pilot Program," briefing slides of presentation to U.S. Army Surgeon General, Washington, DC, 9 December 2002.

[32] Ibid.

[33] Personal experience with the 5010th US Army Hospital, Louisville KY.

[34] Personal experience with the 4212th U.S. Army Hospital, Kingsport, TN. The AMEDD recruiting office for that hospital is in Huntington, WV, nearly 200 miles away with no direct interstate highway travel between.

[35] LTG John Le Moyne, G1, U.S Army, "LO-03 Annex I (Manning the Force and Investing in Quality People) to the Army Transformation Campaign Plan (28 1400 Feb 03)" (FOUO), (Washington, DC: U.S. Department of the Army, 28 February 2003), 11.

[36] Curtis L. Gilroy, David K. Horne, and D. Alton Smith, eds., *Military Compensation and Personnel Retention: Models and Evidence* (Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, 1991).

[37] Eitelbert, Mark J., and Stephen L. Mehay, eds. *Marching Toward the 21st Century: Military Manpower and Recruiting*. Westport, Connecticut: Greenwood Press, 1994.

[38] LTC J. D. Quivalen, "SERMC Readiness Recruitment Brief" briefing slide from presentation of the 2nd AMEDD Recruiting Detachment at the Southeast Regional Medical Conference, March 2002.

[39] Le Moyne, 17. There are 7 categories of these payments—all governed by Title 37, U.S.C.

[40] Ibid.

[41] Quivalen.

[42] AmerInd, Inc., "Results from the Survey of USAR Physicians" (Washington, DC: Office of the Chief, Army Reserve, summer 1996. Distributed to numerous senior Army medical offices. Copy obtained from the AMEDD Personnel Proponent Directorate.), I.3.

[43] Ibid., I.4.

[44] Ibid.

[45] General Accounting Office, *Military Personnel—Preliminary Observations Related to Income, Benefits, and Employer Support for Reservists: Testimony Before the Subcommittee on Total Force, Committee on Armed Services, House of Representatives*, (Washington, DC: U.S. General Accounting Office, 19 March 2003), 9.

[46] AmerInd, Inc., I.3.

[47] LTC Garland Knott, Office of Reserve Affairs, Office of the Surgeon General, "AC/RC Integration Item 98-96B, Reserve Component Medical Recruiting, Retention and Strength Management," memorandum for Reserve Component Coordination Council, Washington, DC, 1 December 2001; available through Army Knowledge Online; Army Intranet; accessed 9 December 2003.

[48] U.S. Army Medical Department, "Reserve 90-Day Rotation Policy Implemented (1999)," April 2003 [webpage]; available from <http://www.armymedicine.army.mil/about/tl/99-reserve90.htm>; Internet; accessed 9 December 2003.

[49] AmerInd, Inc. and Applied Research Analysts, "Evaluation of the Presidential Reserve Call-Up 90-Day Rotation Pilot Program: Results from a Mail Survey of ARNG and USAR Physicians, Dentists and Nurse Anesthetists," (Conducted for The Office of the Surgeon General, National Guard Bureau and U.S. Army Reserve, 5109 Leesburg Pike, Suite 686, Falls Church, VA 22041-3258, 23 May 2001).

[50] MAJ Jane A. Cronk, "Clinician Retention Analysis Plan – Background Information re: 90-Day Rotation Policy" [Informational Paper from Major Cronk to Colonel Jane McCullough, both of Headquarters, Medical Command, U.S. Army], 22 September 2003. Forwarded in related E-mail to the author on 13 November 2003.

[51] AmerInd, Inc. and Applied Research Analysts, xv.

[52] Ibid., iii.

[53] Ibid., ii.

[54] Ibid., iii.

[55] Ibid., iv.

[56] AmerInd, Inc. and Applied Research Analysts, "Evaluation of the Presidential Reserve Call-Up 90-Day Rotation Pilot Program: Results from Six Focus Groups Conducted with 313th and 399th USAR Combat Support Hospitals Deploying to and Returning from Kosovo," (Conducted for The U.S. Army Reserve, March—November 2001), (no page; reference is to the entire document.)

[57] Ibid., 3.

[58] Ibid., 8.

[59] Ibid., 13-14.

[60] AmerInd, Inc. and Applied Research Analysts, "Evaluation of the Presidential Reserve Call-up 90-Day Rotation Pilot Program," briefing slides of presentation to U.S. Army Surgeon General, Washington, DC, 9 December 2002.

[61] General Accounting Office, *Military Personnel—Preliminary Observations Related to Income, Benefits, and Employer Support for Reservists: Testimony before the Subcommittee on Total Force, Committee on Armed Services, House of Representatives*, (Washington, DC: U.S. General Accounting Office, 19 March 2003), highlights page.

BIBLIOGRAPHY

AmerInd, Inc. "Results from the Survey of USAR Physicians." Washington, DC: Office of the Chief, Army Reserve, summer 1996. Copy obtained from the Army Medical Department (AMEDD) Personnel Proponent Directorate.

AmerInd, Inc. and Applied Research Analysts "Evaluation of the Presidential Reserve Call-Up 90-Day Rotation Pilot Program: Results from a Mail Survey of ARNG and USAR Physicians, Dentists and Nurse Anesthetists." Study conducted for The Office of the Surgeon General, National Guard Bureau and U.S. Army Reserve, 5109 Leesburg Pike, Suite 686, Falls Church, VA 22041-3258, 23 May 2001.

AmerInd, Inc. and Applied Research Analysts, "Evaluation of the Presidential Reserve Call-Up 90-Day Rotation Pilot Program: Results from Six Focus Groups Conducted with 313th and 399th USAR Combat Support Hospitals Deploying to and Returning from Kosovo." Study conducted for the U.S. Army Reserve, March—November 2001. (Forwarded in related E-mail to the author on 28 October 2003.)

AmerInd, Inc. and Applied Research Analysts. "Evaluation of the Presidential Reserve Call-up 90-Day Rotation Pilot Program." Briefing slides of presentation to the U.S. Army Surgeon General, Washington, DC 9 December 2002. (Forwarded in related E-mail to the author on 28 October 2003.)

Cronk, Jane A. "Clinician Retention Analysis Plan – Background Information re: 90-Day Rotation Policy" [Informational Paper from Major Cronk to Colonel Jane McCullough, both of Headquarters, Medical Command, U.S. Army], 22 September 2003. (Forwarded in related E-mail to the author on 13 November 2003.)

Department of the Army. *Installation Management*. Field Manual 100-22. Washington, DC: U.S. Department of the Army, 11 October 1994. Available from <http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/100-22/fm100_21.htm >. Internet. Accessed 9 December 2003.

Eitelbert, Mark J., and Stephen L. Mehay, eds. *Marching Toward the 21st Century: Military Manpower and Recruiting*. Westport, Connecticut: Greenwood Press, 1994.

Fortuin, Nancy, Office of the Surgeon General (Reserve Affairs). "OTSG Update." Data from briefing slides. Atlanta, GA: Southeast Regional Medical Command Readiness Conference, 18 March 2000.

Gillett, Mary C. *The Army Medical Department, 1775-1818*. Washington, DC: Center of Military History, United States Army, 1995.

Gilroy, Curtis L., David K. Horne, and D. Alton Smith, eds. *Military Compensation and Personnel Retention: Models and Evidence*. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, 1991.

Herbst, Kenneth. "Army Reserve Medical Corps Recruiting." Briefing slides with commentary. Washington, DC, Office of The Surgeon General, Department Of The Army, 15 August 2003. (Forwarded in related E-mail to the author on 18 September 2003.)

Knott, Garland. “AC/RC Integration Item 98-96B, Reserve Component Medical Recruiting, Retention and Strength Management.” Memorandum for Reserve Component Coordination Council. Washington, DC, 1 December 2001. Available through Army Knowledge Online. Army Intranet. Accessed 9 December 2003.

Le Moyne, John. “LO-03 Annex I (Manning the Force and Investing in Quality People) to the Army Transformation Campaign Plan (28 1400 Feb 03)” (FOUO). Washington, DC: U.S. Department of the Army, 28 February 2003.

Ledford, Frank F., Jr. “From the Surgeon General of the Army: Medical Support for Operation Desert Storm.” *Journal of the US Army Medical Department* (January/February 1992).

McMinn, John H. and Max Levin. *Personnel in World War II: Medical Department, United States Army*. Washington, DC: Office of the Surgeon General, Department of the Army, 1963.

Peake, James B. “Introduction to the AMEDD.” Briefing slides with commentary. Washington, DC: Office of the Surgeon General, Department of the Army, July 2002.

Quivalen, J. D. “SERMC Readiness Recruitment Brief.” Briefing slide from presentation of the 2nd AMEDD Recruiting Detachment at the Southeast Regional Medical Conference, March 2002.

Rabren, Doug “Medical Reengineering Initiative (MRI) Program.” Information paper. Medical Reengineering Initiative Program Implementation Office, Fort Belvoir, VA. 6 December 2002. Available from <http://mrimedforce.belvoir.army.mil/memoranda/MRIInfoPaperDec02.htm >. Internet. Accessed 21 December 2003.

Strong, John L. “RCCC Meeting Memorandum of 8 May 2003: Key Points and Taskings.” Memorandum for Reserve Component Coordination Council. Department of the Army, Washington, DC, 16 May 2003. (Forwarded in related E-mail to the author on 18 September 2003.)

U.S. Army Medical Department Regiment. *Army Medical Department Guide* [undated webpage]. Fort Sam Houston, Texas: United States Army Medical Department Regiment. Available from <http://ameddregiment.amedd.army.mil/otg/chapter_2.htm>. Internet. Accessed 21 December 2003.

U.S. Army Medical Department. “Reserve 90-Day Rotation Policy Implemented (1999).” April 2003 [webpage]. Available from <http://www.armymedicine.army.mil/about/tl/99-reserve90.htm>. Internet. Accessed 9 December 2003.

U.S. Army War College. *How the Army Runs: A Senior Leader Reference Handbook, 2003-2004*. Carlisle Barracks, Pennsylvania: U.S. Army War College, 2003.

U.S. Army Forces Command. *Reserve Component Unit Commander’s Handbook* . FORSCOM Regulation 500-3-3. Fort McPherson, GA: U.S. Army Forces Command, 15 July 1999.

U.S. General Accounting Office *Military Personnel - Preliminary Observations Related to Income, Benefits, and Employer Support for Reservists: Testimony Before the*

Subcommittee on Total Force, *Committee on Armed Services, House of Representatives*. Washington, DC: U.S. General Accounting Office, 19 March 2003.

U.S. General Accounting Office. *Operation Desert Storm - Full Army Medical Capability Not Achieved: Report to the Chairman, Subcommittee on Military Personnel and Compensation, Committee on Armed Services, House of Representatives*. Washington, DC: U.S. General Accounting Office, August 1992.

Winkler, John D. "Reserve Component Contributions to National Defense." Briefing slides with commentary. Arlington, VA: Defense Department Advisory Committee on Women in the Services meeting, 9 May 2003. Available from <www.dtic.mil/dacowits/briefings/ReservePanel.ppt>. Internet. Accessed 14 October 2003.